COURSE INFORMATION
Chemistry 557, Fall 2013
Nanocarbons

Instructor:

Prof. R. Bruce Weisman
111-D Space Sciences Building
713-348-3709
weisman@rice.edu

Class Hours:

Monday and Wednesday, 11:00 a.m. – 12:15 p.m. SS 337

Office Hours:

Flexible. Call or email for appointment.

Textbook:

None. Copies of relevant papers will be distributed.

Topics to be Covered:

Fullerenes
- physical structure and symmetries
- electronic and optical properties
- processing, reactions and functionalization
- endohedrals
- applications

Carbon Nanotubes
- single- and multi-wall structures and growth methods
- electronic and optical properties
- SWCNT processing, reactions, and characterization methods
- applications

Graphene
- preparation; electronic and optical properties
- processing and characterization methods
- applications

Assignments:

Reading and discussing selected published papers (25% of grade)

Solving homework problem sets (35% of grade)

Writing an in-depth literature report on one topic (20% of grade)

Orally presenting the literature report (20% of grade)